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Atty. Docket No.: P64616US0

IN THE CLAIMS

Please cancel/amend/retain the claims as follows:

1. (Currently Amended) An automated method of designating text, taken from a set of citing documents, as reasons for citing (RFC) a cited document that are associated with respective citing instances of a citing document, the method comprising:

obtaining contexts of the citing instances in the respective citing documents, each context including a text unit that includes the citing instance and a text unit that is near the citing instance;

analyzing the content of the contexts, said step of analyzing including calculating a content score for each text unit based on text unit content words that are common to at least two of the citing documents' contexts or to at least one citing document's context and said cited document, said step of calculating a content score including the steps of,

calculating respective initial content scores (ICS) for the text units in the citing documents, based on the content words in the text units;

calculating respective distances of the text units in the citing documents from respective citing instances of the cited document; and

calculating respective content scores (CS) for the text units in the citing documents, based on at least the ICS and the distances; and

selecting, from the citing instances' context, at least one text unit that constitutes the RFC, based on the analyzed content of the contexts.

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2. (Currently Amended) An automated method of designating text, taken from a set of citing documents, as reasons for citing (RFC) a cited document, said RFC being associated with respective citing instances of a citing document, the method comprising:

inputting text from the citing documents;

dividing the citing documents' text to define paragraphs, and dividing the paragraphs to define sentences;

obtaining contexts of the citing instances in the respective citing documents, each context including: a sentence that includes the citing instance and at least one sentence that is near the citing instance;

generating a content word list containing content words that are in at least two of the citing documents' contexts or that are in at least one citing document's context and said cited document;

calculating, for the sentences in the citing documents' contexts, respective content scores that are based on frequency counts of the content words that are recited in the respective sentences, said step of calculating content scores including the steps of,

calculating respective initial content scores (ICS) for the sentences in the citing documents, based on the content words in the sentences;

calculating respective distances of the sentences in the citing documents from respective citing instances of the cited document; and

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calculating respective content scores (CS) for the sentences in the citing documents, based on at least the ICS and the distances; and

selecting, from the citing documents' contexts, at least one sentence that constitutes the RFC, based on the calculated content scores.

3. (Previously Presented) The method of claim 1, wherein the step of analyzing the content includes:

generating a content word list based on the content words that are included in the contexts of at least two of the citing documents, and assigning each of said content words a frequency count which is used in calculating the content score.

4. (Previously Presented) The method of claim 1, wherein the step of analyzing the content includes:

generating a content word list based on the content words that are included both in the cited document itself and in the context of at least one citing document, and assigning each of said content words a frequency count which is used in calculating the content score.

Claims 5-15 (Canceled).

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16. (Currently Amended) An apparatus for designating text, taken from a set of citing documents, as reasons for citing (RFC) a cited document that are associated with respective citing instances of a citing document, the apparatus comprising:

means for obtaining contexts of the citing instances in the respective citing documents, each context including a text unit that includes the citing instance and a text unit that is near the citing instance;

means for analyzing the content of the contexts, said means for analyzing including means for calculating a content score for each text unit based on text unit content words that are common to at least two of the citing documents' contexts or to at least one citing document's context and said cited document, said means for calculating a content score including,

means for calculating respective initial content scores (ICS) for the text units in the citing documents, based on the content words in the text units;

means for calculating respective distances of the text units in the citing documents from respective citing instances of the cited document; and

means for calculating respective content scores (CS) for the text units in the citing documents, based on at least the ICS and the distances; and

means for selecting, from the citing instances' context, at least one text unit that constitutes the RFC, based on the analyzed content of the contexts.

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17. (Currently Amended) An apparatus for designating text, taken from a set of citing documents, as reasons for citing (RFC) a cited document, said RFC being associated with respective citing instances of a citing document, the apparatus comprising:

means for dividing the citing documents' text to define paragraphs, and for dividing the paragraphs to define sentences;

means for obtaining contexts of the citing instances in the respective citing documents, each context including: a sentence that includes the citing instance and at least one sentence that is near the citing instance;

means for generating a content word list containing content words that are in at least two of the citing documents' contexts or that are in at least one citing document's context and said cited document;

means for calculating, for the sentences in the citing documents' contexts, respective content scores that are based on frequency counts of the content words that are recited in the respective sentences, said means for calculating content scores including,

means for calculating respective initial content scores (ICS) for the sentences in the citing documents, based on the content words in the sentences;

means for calculating respective distances of the sentences in the citing documents from respective citing instances of the cited document; and

means for calculating respective content scores (CS) for the sentences in the citing documents, based on at least the ICS and the distances; and

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means for selecting, from the citing documents' contexts, at least one sentence that constitutes the RFC, based on the calculated content scores.

18. (Previously Presented) The apparatus of claim 16, wherein the means for analyzing the content includes:

means for generating a content word list based on the content words that are included in the contexts of at least two of the citing documents, and for assigning each of said content words a frequency count which is used in calculating the content score.

19. (Previously Presented) The apparatus of claim 16, wherein the means for analyzing the content includes:

means for generating a content word list based on the content words that are included both in the cited document itself and in the context of at least one citing document, and assigning each of said content words a frequency count which is used in calculating the content score.

Claims 20-30 (Canceled).

31. (Currently Amended) A computer-readable memory that, when used in conjunction with a computer, can carry out a method of designating text, taken from a set of citing

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documents, as reasons for citing (RFC) a cited document that are associated with respective citing instances of a citing document, the computer-readable memory comprising:

computer-readable code for obtaining contexts of the citing instances in the respective citing documents, each context including a text unit that includes the citing instance and a text unit that is near the citing instance;

computer-readable code for analyzing the content of the contexts including computer-readable code for calculating a content score for each text unit based on text unit content words that are common to at least two of the citing documents' contexts or to at least one citing document's context and said cited document, said computer-readable code for calculating a content score including,

computer-readable code for calculating respective initial content scores (ICS) for the text units in the citing documents, based on the content words in the text units;

computer-readable code for calculating respective distances of the text units in the citing documents from respective citing instances of the cited document; and

computer-readable code for calculating respective content scores (CS) for the text units in the citing documents, based on at least the ICS and the distances; and

computer-readable code for selecting, from the citing instances' context, at least one text unit that constitutes the RFC, based on the analyzed content of the contexts.

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32. (Currently Amended) A computer-readable memory that, when used in conjunction with a computer, can carry out a method of designating text, taken from a set of citing documents, as reasons for citing (RFC) a cited document, said RFC being associated with respective citing instances of a citing document, the apparatus comprising:

computer-readable code for inputting text from the citing documents;

computer-readable code for dividing the citing documents' text to define paragraphs, and dividing the paragraphs to define sentences;

computer-readable code for obtaining contexts of the citing instances in the respective citing documents, each context including: a sentence that includes the citing instance and at least one sentence that is near the citing instance;

computer-readable code for generating a content word list containing content words that are in at least two of the citing documents' contexts or that are in at least one citing document's context and said cited document;

computer-readable code for calculating, for the sentences in the citing documents' contexts, respective content scores that are based on frequency counts of the content words that are recited in the respective sentences, said computer-readable code for calculating content scores including,

computer-readable code for calculating respective initial content scores (ICS) for the sentences in the citing documents, based on the content words in the sentences;

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computer-readable code for calculating respective distances of the sentences in the citing documents from respective citing instances of the cited document; and
computer-readable code for calculating respective content scores (CS) for the sentences in the citing documents, based on at least the ICS and the distances; and
computer-readable code for selecting, from the citing documents' contexts, at least one sentence that constitutes the RFC, based on the calculated content scores.

33. (Previously Presented) The computer-readable memory of claim 31, wherein the computer-readable code for analyzing the content includes:

computer-readable code for generating a content word list based on the content words that are included in the contexts of at least two of the citing documents, and for assigning each of said content words a frequency count which is used in calculating the content score.

34. (Previously Presented) The computer-readable memory of claim 31, wherein the computer-readable code for analyzing the content includes:

computer-readable code for generating a content word list based on the content words that are included both in the cited document itself and in the context of at least one citing document, and for assigning each of said content words a frequency count which is used in calculating the content score.

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Claims 35-45 (Canceled).

46. (Previously Presented) The method of claim 2, wherein the step of generating a content word list includes the steps of:

associating paragraphs from the documents;

processing text in the associated paragraphs to eliminate noise words that convey little information about paragraph content;

determining common words that are not eliminated by the processing step and that are found in at least two paragraphs;

tallying frequency counts that indicate respective numbers of paragraphs within which the common words are encountered, said frequency counts indicating a degree of relevance for respective common words; and

forming the content word list to include the common words linked to respective frequency counts.

47. (Previously Presented) The method of claim 46, wherein the step of determining includes stemming the common words of the associated paragraphs to a length that preserves their essential character while eliminating characters that convey little information about word identity.

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48. (Canceled).

49. (Currently Amended) The method of claim 48 2, wherein the step of calculating content scores further includes the step of normalizing the ICS to form normalized initial content scores (NICS) for use by the CS calculation step, said normalizing step taking into account numbers of words in the respective sentences and a largest frequency count in the content word list.

50. (Currently Amended) The method of claim 48 2, wherein the step of calculating content scores further includes the step of modifying the distances to form respective modified absolute distances for use by the the CS calculation step, said step of distance modification being based upon criteria relating to predetermined statistical observations of implications of placement of a sentence in the citing document relative to the citing instance, said criteria including whether a sentence is in a same paragraph with the citing instance or is located after the citing instance.

51. (Previously Presented) The apparatus of claim 17, wherein the means for generating a content word list includes:

means for associating paragraphs from the documents;

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means for processing text in the associated paragraphs to eliminate noise words that convey little information about paragraph content;

means for determining common words that are not eliminated by the processing step and that are found in at least two paragraphs;

means for tallying frequency counts that indicate respective numbers of paragraphs within which the common words are encountered, said frequency counts indicating a degree of relevance for respective common words; and

means for forming the content word list to include the common words linked to respective frequency counts.

52. (Previously Presented) The apparatus of claim 51, wherein the means for determining includes means for stemming the common words of the associated paragraphs to a length that preserves their essential character while eliminating characters that convey little information about word identity.

53. (Canceled).

54. (Currently Amended) The apparatus of claim ~~53~~ 17, wherein the means for calculating content scores further includes means for normalizing the ICS to form normalized initial content scores (NICS) for use by the CS calculation step, said normalizing means taking

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into account numbers of words in the respective sentences and a largest frequency count in the content word list.

55. (Currently Amended) The apparatus of claim ~~53~~ 17, wherein the means for calculating content scores further includes means for modifying the distances to form respective modified absolute distances for use by the the CS calculation step, said distance modification means using criteria relating to predetermined statistical observations of implications of placement of a sentence in the citing document relative to the citing instance, said criteria including whether a sentence is in a same paragraph with the citing instance or is located after the citing instance.

56. (Previously Presented) The computer-readable memory of claim 32, wherein the computer-readable code for generating a content word list includes:

- computer-readable code for associating paragraphs from the documents;
- computer-readable code for processing text in the associated paragraphs to eliminate noise words that convey little information about paragraph content;
- computer-readable code for determining common words that are not eliminated by the processing step and that are found in at least two paragraphs;

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computer-readable code for tallying frequency counts that indicate respective numbers of paragraphs within which the common words are encountered, said frequency counts indicating a degree of relevance for respective common words; and

computer-readable code for forming the content word list to include the common words linked to respective frequency counts.

57. (Previously Presented) The computer-readable memory of claim 56, wherein the computer-readable code for determining includes computer-readable code for stemming the common words of the associated paragraphs to a length that preserves their essential character while eliminating characters that convey little information about word identity.

58. (Canceled).

59. (Currently Amended) The computer-readable memory of claim ~~58~~ 32, wherein the computer-readable code for calculating content scores further includes computer-readable code for normalizing the ICS to form normalized initial content scores (NICS) for use by the CS calculation step, said normalizing computer-readable code taking into account numbers of words in the respective sentences and a largest frequency count in the content word list.

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60. (Currently Amended) The computer-readable memory of claim ~~58~~ 32, wherein the computer-readable code for calculating content scores further includes computer-readable code for modifying the distances to form respective modified absolute distances for use by the the CS calculation step, said distance modification computer-readable code using criteria relating to predetermined statistical observations of implications of placement of a sentence in the citing document relative to the citing instance, said criteria including whether a sentence is in a same paragraph with the citing instance or is located after the citing instance.